



#### ABSTRACT OF THE DISCLOSURE

In a method of preparing a sample chip and observing a wall surface thereof a preselected portion of a sample and an area surrounding the preselected portion of the sample are etched by irradiating the sample with a focused ion beam to form a sample chip having a wall surface formed with stepped portions. The sample chip is then taken out from the sample. The wall surface of the sample chip is then observed with a scanning probe microscope.